

NATIONAL PRIORITIES LIST (NPL)

Final Site

May 2014

MACMILLAN RING FREE OIL | Norphlet, Arkansas Union County

Site Location:

MacMillan Ring Free Oil is an abandoned refinery located in Norphlet, Union County, Arkansas. The 100-acre facility is bordered by a residential subdivision and the Norphlet Public School on the west, Hayes Creek on the north and east, and Massey Creek to the southwest.

Site History:

MacMillan Ring-Free Oil Refinery operated as a crude oil refinery and manufacturer of lubrication oil and asphalt products from 1929 to 1987. The property was sold in 1989 to Nor-Ark Industrial Corp. who used the on-site storage tanks for asphalt products until March of 1991 when the company filed for bankruptcy. The facility was refurbished by Norphlet Chemical as a chemical manufacturing plant in early 2004 to produce tetrafluoroethane (Freon 134A), an automotive refrigerant. In 2007, the facility was abandoned and has remained vacant. The Arkansas Department of Environmental Quality (ADEQ) placed the site on the State Priority List under the Arkansas Pollution Control and Ecology Commission's Regulation No. 30 due to the potential for soil, surface water and/or ground water contamination and the need to remediate the site to protective levels. The ADEQ conducted a Comprehensive Site Assessment which developed remedial alternatives and, in November 2011, referred the site to the EPA for NPL consideration.

Site Contamination/Contaminants:

Surface and subsurface soil, ground water and surface water/sediment are contaminated with polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH) and metals.

Potential Impacts on Surrounding Community/Environment:

Surface water and ground water is contaminated. Sampling conducted by the EPA and ADEQ indicate that there may be as much as a foot of petroleum product underlying the facility. Currently there are several active seeps of waste discharging into surface drainage pathways and into wetland areas north of the site. Without remediation of the site, additional releases to ground water, surface water and soil will continue to occur.

Response Activities (to date):

Extensive assessment and removal actions were completed at MacMillan in the early 1990s to clean up free liquids in the impoundments and prevent active releases to surface water. Wastes were treated on-site and treated materials were used to backfill the impoundments. In April 2009, a removal action by the EPA of tanks containing anhydrous hydrofluoric acid (AHF) and AHF mixtures was conducted.

■ Need for NPL Listing:

The site was referred to the EPA in 2011 from the state of Arkansas. Without listing, the site contamination will continue to pose a risk to human health and the environment. Other federal and state cleanup programs were evaluated, but are not viable at this time. The EPA received a letter of support for placing this site on the NPL from the state.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaqs/index.asp or by telephone at 1-888-42-ATSDR or 1-888-422-8737.